

Application/Control Number: 09/775,970

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CANCEL CLAIMS 1-3

4. A liquid crystal Fabry-Perot etalon comprising:
- a first substrate coated on a first side with a first transparent conductor layer;
 - a first reflector layer disposed over the first transparent conductor layer on the first side of the first substrate;
 - an alignment layer disposed over the first transparent conductor layer on the first side of the first substrate;
 - a second transparent conductor layer;
 - liquid crystal filled in between the alignment layer and the second transparent conductor layer; and

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a second substrate coated on a first side with a second reflector layer, the first side of the second substrate facing the first side of the first substrate;

wherein the first transparent conductor layer and the second transparent conductor layer are each etched so as to form multiple independent etalons.

5. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched according to a grid pattern.

6. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched according to a wedge pattern.

7. The liquid crystal Fabry-Perot etalon of claim 4, wherein the first and second transparent conductor layers are etched using a laser.

8. The liquid crystal Fabry-Perot etalon of claim 7, wherein the first and second transparent conductor layers are etched using an Nd:YAG laser.

9. The liquid crystal Fabry-Perot etalon of claim 4, wherein each of the multiple independent etalons is independently tunable to different wavelengths.

10. The liquid crystal Fabry-Perot etalon of claim 4, wherein each of the multiple independent etalons comprises as an independently tunable filter.

11. The liquid crystal Fabry-Perot etalon of claim 4, wherein the second transparent conductor layer is coated on the second substrate.

12. The liquid crystal Fabry-Perot etalon of claim 4, further comprising:
a spacer plate disposed between the first substrate and the second substrate,
wherein the second transparent conductor layer is coated on the spacer plate.

CANCEL CLAIMS 13-25.